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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/680,817

10/07/2003

Haven S. Aldrich

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ExxonMobil Research & Engineering Company
P.O. Box 900
1545 Route 22 East
Annandale, NJ 08801-0900

EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1711

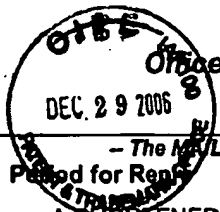
MAIL DATE

DELIVERY MODE

03/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No.

10/680,817

Applicant(s)

ALDRICH ET AL.

Examiner

Olga Asinovsky

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

The amendment of August 22, 2006 changes the scope of claims. Because the preamble of amended claims is "A lubricant." Therefore, the Title of the invention and the Abstract are not descriptive.

The new search has been made.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlosberg et al. U.S. Patent 5,744,434.

The amended claims recite a lubricant comprising: (a) a base stock, and (b) an additive wherein the additive selected from the group consisting of: (i) and (ii), the additive functions as antioxidants or antioxidant boosters. The components (a) and (b)(i) and (b)(ii) are under Markush group practice.

The examiner notes that there is no definition of radical "R" for (b)(ii) component.

Schlosberg discloses a lubricant comprising at least one base stock and at least one synthetic ester composition, claim 13 at column 23. The base stocks are readable for being claimed (a) component, column 23, lines 46-50. The synthetic ester composition

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exhibits thermal and oxidative stability, col. 2, lines 66-67. The synthetic ester composition is polyol ester having high hydroxyl number, col. 3, lines 20-30; col. 4, lines 67-67 and col. 5, lines 6-12. Polyol esters are readable for being claimed (b)(i) additive. The polyol ester having hydroxyl numbers higher than 30 or 50, or 70 are readable at columns 16-18, Tables 4-6, for the present claims 14-16. In addition, the lubricant can include amino-esters, amides, imides and axazolines, column 9, line 15. The present claims are fully anticipated by the disclosure in Schlosberg invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pafford et al U.S. Patent 5,698,502.

Pafford discloses lubricants comprising the base stocks admixed with various additive packages, column 1, lines 23-25. The base stocks include mineral oils, poly alpha-olefins, polyalkylene glycols, phosphate esters, diesters and polyol esters, column 1, lines 26-30; and column 7, lines 59-67. The base stocks are readable for being claimed (a) base stock in the present claims. Polyol esters have been commonly used as base stocks, however, conventional synthetic polyol esters require the addition of additives to improve thermal/oxidative stability of the base stocks, column 1, lines 43-44 and 52-60.

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The benefit to enhance thermal/oxidative stability was given to a polyol ester composition having higher unconverted hydroxyl groups, column 2, lines 59-67; column 3, lines 40-50; column 4, lines 41-55. Synthetic polyol ester having high hydroxyl number in the range of 5 to 180 is readable in the present claims 14-16. The synthetic polyol ester composition is formed by reacting a polyhydroxyl compound with at least one branched and/or linear acid, column 5, lines 14-15. The acid can include adipic acid, azelaic acid, sebacic acid and dodecanedioic acid, column 7, lines 19-20. The additives selected from the polyol esters having high hydroxyl number are readable in the present claims for being (b) (i) component. The unconverted hydroxyl groups act as internal antioxidants, column 5, lines 31-32.

It would have been obvious to one of ordinary skill in the art to use a lubricant oil composition in Pafford invention comprising a base stock and a polyol ester composition wherein the polyol ester can be selected for being equivalent to the present claim 12, and to consider that said polyol ester can have high hydroxyl number specified in the range in the present claims 14-16 for the purposes for obtaining the desired thermal and oxidative stability of the resulting composition.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schlosberg et al U.S. Patent 5,477,434 or Pafford et al U.S. Patent 5,698,502 as applied to claims 12 and 14-16 above, and further each in view of Ryer et al U.S. Patent 5,185,090.

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The primary references do not disclose sulfur-containing additive or a phosphorous-containing antioxidant.

Ryer discloses a phosphorous- and sulfur-containing which are very effective in enhancing the anti-wear and anti-oxidation characteristics of oleaginous compositions, such as fuels and lubricating oils, column 13, lines 28-31, for the present claim 13. It would have been obvious to one of ordinary skill in the art to add a phosphorous- and/or sulfur-containing antioxidant of Ryer invention into a lubricant composition of Schlosberg invention and Pafford invention for the purposes to improve of the anti-wear and anti-oxidant characteristics of the resulting lubricating oils in the absence of any unexpected results derived from said modification.

4. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et al U.S. Patent 5,433,891 or Gutierrez et al U.S. Patent 4,702,850.

References have been considered in the prior office action mailed on 06/05/2006.

Chou does disclose hydrocarbon fuel that is readable for being (a) and a mixture of an iminoalcohol compound with an oxazolidine compound that is readable for being (b).

The mixture of iminoalcohol with oxazolidine compound can be used to facilitate expose of an industrial fluid at low temperature, column 8, lines 21-24. It would have been obvious to one of ordinary skill in the art to consider that the mixture of an iminoalcohol compound and an oxazolidine compound can be functioned as antioxidant booster because said mixture is used to facilitate expose hydraulic fluid at low temperature.

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Gutierrez does disclose mineral oil based stock (a) and the reaction product of di-ester with a sulfur-containing compound for being (b)(ii) in the present claims. Radical "R" in the present claims can include any alkyl group and any derivative thereof. The composition in Gutierrez invention has wear resistance and oxidation inhibitions. It would have been obvious to one of ordinary skill in the art to use mineral oil based fluid composition in Gutierrez invention and the reaction product of di-ester with a sulfur-containing compound that is readable for being (b)(ii) in the present claims, and, thereby, obtain the claimed requirement.

Response to Arguments

5. Applicant's arguments filed August 22, 2006 and October 10, 2006 have been fully considered but they are not persuasive. Arguments that neither Gutierrez nor Chou discloses the claimed reaction product of a polyol diacrylate and a general antioxidant YH are not persuasive. Claimed (b) additive is cited under Markush group practice that can be selected as a component having antioxidant property. Each reference discloses a lubricating oil composition having antioxidant compound or being functioned as antioxidant booster.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

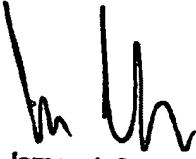
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.A.

December 12, 2006



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700